
Specifications

QPC430 and QPC723 interfaces

The NT7D16 Data Access Card provides the same features as the QPC430 four-port Asynchronous Interface Line Card (AIRC) and the QPC723 RS-232 Interface Line Card (RILC). The operational mode for each port is determined in LD11.

Download parameters

These parameters are configured in the system through service change operations. They are then downloaded to the DAC. For a complete description of the service change procedures, see the *X11 input/output guide* (553-3001-400).

System parameters

System parameters downloaded by the switch include the type of system, the inactivity timer, and the data DN. These parameters are described below:

- System type: Meridian 1
- Inactivity timeout
 - No timeout
 - 15 minutes
 - 30 minutes
 - 60 minutes
- DDN: 1 to 7 digits (0–9)

Operating parameters

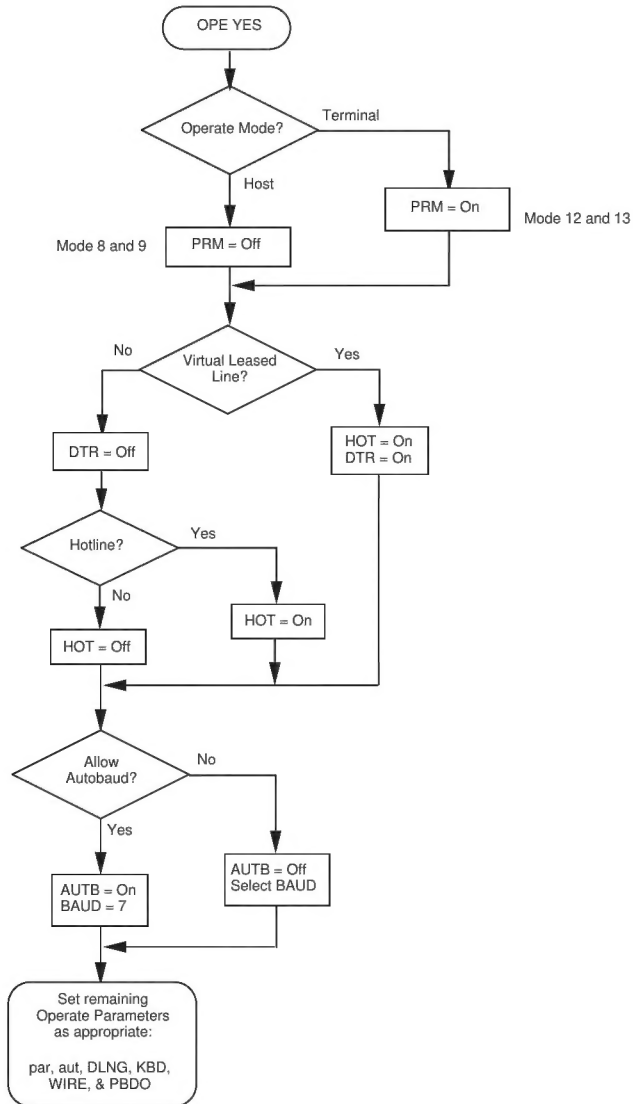
There are thirteen parameters configured in the system that are downloaded to the DAC. They are:

- Dialogue parity
 - Space (OFF)
 - Mark (ON)
 - Even
 - Odd
- DTR control
 - Dynamic (affected by call progress)
 - Forced ON
- DCD control
 - Dynamic (affected by call progress)
 - Forced ON
- Dialing mode
 - Manual (user initiates the call with dialogue commands)
 - Hotline (call the Autodial number upon connection)
- Wire test
 - Disabled (can be invoked only with front panel switch)
 - Enabled (start only if the DAC firmware is idle)
- Language
 - English
 - Quebec French
- Keyboard dialing
 - Enabled (allow both keyboard or Hayes dialing modes)
 - Disabled (Hayes dialing only)

- Make port busy
 - Disabled—On with DTR (normal)
 - Enabled—Off with DTR (modes 8 or 12, and no DTR for 5 seconds)
- Auto Baud
 - Variable (use auto baud rate)
 - Fixed (use baud rate selection only)
- Baud rate
 - 110
 - 150
 - 300
 - 600
 - 1200
 - 2400
 - 4800
 - 9600
 - 19200
- Operating mode
 - DCE
 - DTE
- Equipment type
 - Terminal (send prompts/replies)
 - Host (suppress prompts/replies)
- Long Break Detect

In Figures 8 and 9, the rectangles represent the settings of service change parameters in LD11 that affect the desired function. The diamonds represent the logical DAC operating mode decisions.

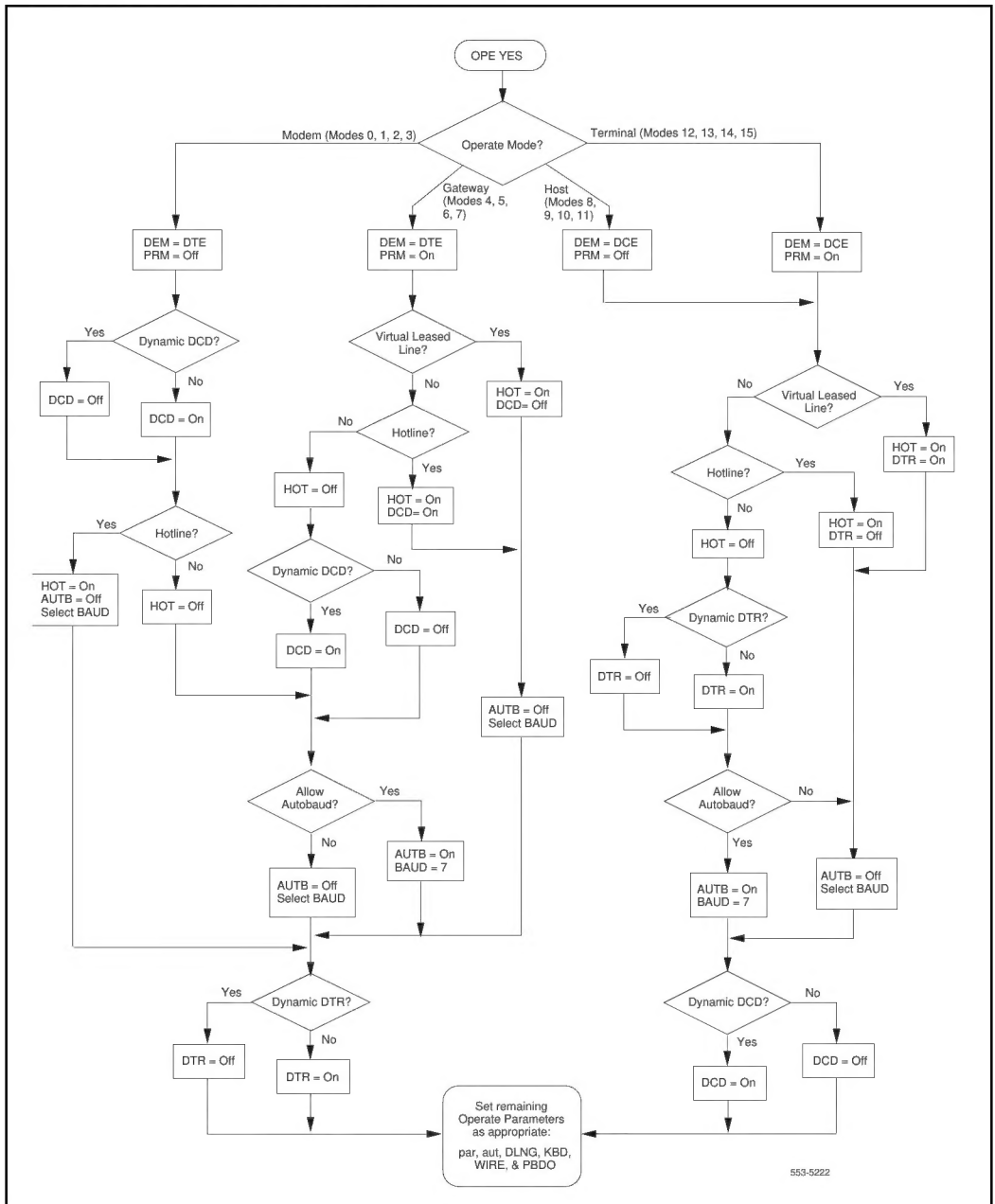
Figure 8
Operating mode selection—RS422



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Note: DTR and PBDO are not prompted.
 WIRE: ON causes TX data to cycle once and Rx data to cycle twice.

Figure 9
Operating mode selection—RS-232-C



Upload parameters

The system can, at any time, request information from a DAC port. The uploaded parameters contain information about the individual card (card type, order code, release information), as well as the status of the configured operating parameters. Because the dialogue operations of data calls can affect the operating parameters, this is useful to monitor and confirm port settings. An additional parameter is listed in the uploaded information: port interface mode (RS-232-C/RS-422). The interface is set by the use of jumpers on the DAC, and cannot be altered by the service change.

System database requirements

To ensure proper operation of the DAC keyboard and Hayes dialing, the system requires the following:

- The Data DN must have only one appearance.
- For access to remote hosts, the TNs class of service must allow external calls. The Data TN must have the following in its class of service:
 - Call Pickup Denied (PUD)
 - Call Forward No Answer Denied (FND)
 - Call Forward Busy Denied (FBD)
 - Data (DTA)

Note: Warning Tone Denied (WTD) defaults if DTA is entered.

- If the DAC is used to call out through modem pooling, where the modem pool consists of dumb modems connected to QMT8 SADM or QMT12 V.35 SADM, the DAC port should be configured with a secondary DN, which has a single appearance.
- The Virtual keys must be assigned as shown in [Table 9](#).

Table 9
Virtual key assignments

Feature key	Key number		Use
	SL-1	SL-100	
Data DN	0	0	Required
Secondary DN	1	1	Required for manual modem pooling
Call Transfer	2	—	Required for manual modem pooling
Auto Dial	3	2	Required for Hotline and VLL
Ring Again	4	6	Optional
Speed Call	5	3	Optional
Display	6	—	Required
Make Set Busy	7	7	Optional

Power supply

Be sure that all power requirements are met before installing the DAC.
Operation may be affected by improper power and environmental conditions.

EIA signals supported

The DAC supports a subset of the standard signals. Only 8 leads can be brought through the backplane connector for each port, totaling 48 leads for each card slot. [Table 10](#) lists the EIA signals supported on this card.

Table 10
EIA signals supported (RS-232-C)

EIA	DB-25 Pin	Signal abbreviation	Description	DCE mode	DTE mode
BA	2	TD	Transmitted Data	In	Out
BB	3	RD	Received Data	Out	In
CB	5	CTS	Clear To Send	Out	In
CC	6	DSR	Data Set Ready	Out	In
AB	7	GND	Signal Ground	—	—
CF	8	DCD	Carrier Detect	Out	In
CD	20	DTR	Data Terminal Ready	In	Out
CE	22	RI	Ring Indicator	Out	In

Note: RS-422 leads supported are: Tx (transmit) and Rx (receive).

Environmental

The DAC functions fully when operating within the following specified conditions:

Specification	Operating	Storage
Ambient temperature	0 to 60 degrees C	40 to 70 degrees C
Humidity	5% to 95%	5% to 95%

Reliability

The DAC has a predicted mean time between failure (MTBF) of 8 years at 45 degrees Celsius. The mean time to repair (MTTR) is 1 hour.